

WHAT IS CLAIMED IS

IAP20 Rec'd PCT/PTO 07 APR 2006

1. A dispensing package, comprising:
 - 5 a dispensing container, the container having a body wall and a head, the head having a neck and a shoulder, the body wall defining a chamber therein, the neck communicating with the body wall via the shoulder, the neck having an orifice therein and a passageway there through extending from the orifice to the chamber, the shoulder having a lug extending therefrom adjacent the periphery thereof, the neck having a first thread extending therefrom, the first thread having a pitch of about 0.08 to about 0.16 inch and an initial full thread generally in alignment with the lug directional with the longitudinal extension of the neck,
 - 10
 - 15 a closure engageable and lockable with the dispensing container, the closure having a top end having a generally circumferential outer skirt extending therefrom and a generally circumferential inner skirt extending therefrom, the inner skirt being situated inside the outer skirt, the inner skirt having a second thread extending therefrom at an inner surface, the
 - 20 second thread being rotatably engageable with the first thread of the neck, the outer skirt terminating at a first edge opposite the top end, the inner skirt terminating at a second edge opposite the top end, the outer skirt having a slot therein extending inward from the first edge, the slot therein being adapted to receive a portion of the lug therein when the closure is in
 - 25 locking position with the head.
2. The package of claim 1, wherein the slot is substantially the same shape as the portion of the lug receivable therein.
- 30 3. The package of claim 2, wherein the slot defines a vertical edge adjacent thereto, also wherein the vertical edge is generally directional with respect to the longitudinal extension of the outer skirt.
4. The package of claim 3, wherein the lug defines a flat surface generally

directional with the longitudinal extension of the neck, the flat surface being engageable with the vertical edge when the closure is in locking position with the head.

- 5 5. The package of claim 1, wherein the lug extends from the neck radially outward.
 6. The package of claim 1, wherein the lug is isolated from and non-integral with the neck.
- 10
7. The package of claim 3, wherein the lug has a notch therein at an outer portion thereof, the lug bearing a flat surface adjacent the notch.
 8. The package of claim 1, wherein there are two lugs extending from the shoulder, the two lugs being positioned oppositely about the neck.
- 15
9. The package of claim 6, wherein there are two lugs extending from the shoulder, the two lugs being positioned oppositely about the neck.
- 20
10. The package of claim 3, wherein the slot extends angularly from the first edge therein to the vertical edge.
 11. The package of claim 1, wherein an outer surface of the outer skirt defines knurls therein extending generally from the first edge toward the top end.
- 25
12. The package of claim 1, wherein one or more ribs extend from an inner surface of the outer skirt from about the middle thereof toward the top end.
- 30
13. The package of claim 12, wherein there are three to six ribs.
 14. The package of claim 1, wherein the shoulder has a diameter of about 0.5 to about 0.75 inch.

15. The package of claim 14, wherein the shoulder has a diameter of about 0.6 inch.
16. The package of claim 1, wherein the inner and outer skirts are tapered 5 inward about 0.5° with respect to the longitudinal extension of the closure.
17. The package of claim 1, wherein the closure has a plug seal extending circumferentially from the top end generally directional to the longitudinal extension of the closure, and wherein the plug seal is adapted to fit within 10 and seal the orifice when the closure is in locking position with the head.
18. The package of claim 1, wherein the closure has a foam layer situated at a central area of an inner surface of the top end thereof, the foam layer being adapted to fit over and seal the orifice when the closure is in locking 15 position with the head.
19. The package of claim 1, wherein the shoulder is substantially flat in shape.
20. The package of claim 1, wherein the first thread has a pitch of about 0.1 to about 0.12 inch.
21. The package of claim 1, wherein the first thread has a pitch of about 0.1 inch.
- 25
22. The package of claim 1, wherein the height of the lug is about one-half of the pitch of the thread on the outer surface of the neck.
23. The package of claim 1, wherein the thread of the neck has a terminal 30 full thread generally in alignment with the lug directional with the longitudinal extension of the neck.

24. A dispensing container, comprising:

a body wall and a head, the head having a neck and a shoulder, the body
5 wall defining a chamber therein, the neck communicating with the body wall
via the shoulder, the neck having an orifice therein and a passageway
there through extending from the orifice to the chamber, the shoulder
having a lug extending therefrom adjacent the periphery thereof, the neck
having a first thread extending therefrom, the first thread having a pitch of
10 about 0.08 to about 0.16 inch and an initial full thread generally in
alignment with the lug directional with the longitudinal extension of the
neck.

25. The container of claim 24, wherein the lug defines a flat surface

15 generally directional with the longitudinal extension of the neck.

26. The container of claim 24, wherein the lug extends from the neck
radially outward.

20 27. The container of claim 24, wherein the lug is isolated from and non-
integral with the neck.

28. The container of claim 25, wherein the lug has a notch therein at an
outer portion thereof, the lug bearing a flat surface adjacent the notch.

25 29. The container of claim 24, wherein there are two lugs extending from
the shoulder, the two lugs being positioned oppositely about the neck.

30 30. The container of claim 27, wherein there are two lugs extending from
the shoulder, the two lugs being positioned oppositely about the neck.

31. The container of claim 24, wherein there are two lugs positioned
oppositely about the neck and each taking the general shape of a
triangloid.

32. The container of claim 24, wherein the shoulder has a diameter of about 0.5 to about 0.75 inch.

5 33. The container of claim 24, wherein the shoulder has a diameter of about 0.6 inch.

34. The container of claim 24, wherein the shoulder is substantially flat in shape.

10

35. The container of claim 24, wherein the first thread has a pitch of about 0.1 to about 0.12 inch.

36. The container of claim 24, wherein the first thread has a pitch of about

15 0.1 inch.

37. The container of claim 24, wherein the height of the lug is about one-half of the pitch of the thread on the outer surface of the neck.

20 38. The container of claim 24, wherein the thread of the neck has a terminal full thread generally in alignment with the lug directional with the longitudinal extension of the neck.

39. A closure, comprising:

25

a top end having a generally circumferential outer skirt extending therefrom and a generally circumferential inner skirt extending therefrom, the inner skirt being situated inside the outer skirt, the inner skirt having a thread extending from and around an inner surface, the outer skirt terminating at a

30 first edge opposite the top end, the inner skirt terminating at a second edge opposite the top end, the outer skirt having a slot therein extending inward from the edge, the slot defining a flat surface adjacent thereto, the flat surface being generally directional with the longitudinal extension of the outer skirt. the slot extending angularly from the edge therein to the flat

surface.

40. The closure of claim 39, wherein an outer surface of the outer skirt defines knurls therein extending generally from the first edge toward the top end.
5
41. The closure of claim 39, wherein one or more ribs extend from an inner surface of the outer skirt from about the middle thereof toward the top end.
10 42. The closure of claim 41, wherein there are three to six ribs.
43. The closure of claim 39, wherein the inner and outer skirts taper inward about 0.5° with respect to the longitudinal extension of the closure.
15 44. The closure of claim 39, wherein the closure has a plug seal extending circumferentially from the top end generally directional to the longitudinal extension of the closure.
45. The closure of claim 39, wherein the closure has a foam layer situated
20 at a central area of an inner surface of the top end thereof.
46. A dispensing packaging, comprising:
a dispensing container, the container having a body wall and a head, the
25 head having a neck and a shoulder, the body wall defining a chamber
therein, the neck communicating with the body wall via the shoulder, the
neck having an orifice therein and a passageway there through extending
from the orifice to the chamber, the neck having a lug extending from the
shoulder adjacent the periphery thereof, the neck having two or more
30 intertwining threads extending therefrom and therealong, the threads
having a pitch of about 0.15 to about 0.30 inch, and each of the at two or
more threads having an initial full thread generally in alignment with the lug
directional with the longitudinal extension of the neck,

- a closure engageable and lockable with the dispensing container, the closure having a top end having a generally circumferential outer skirt extending therefrom and a generally circumferential inner skirt extending therefrom, the inner skirt being situated inside the outer skirt, the inner skirt
- 5 having two or more intertwining threads extending therefrom and therealong at an inner surface, the two or more intertwining threads being rotatably engageable with the two or more intertwining threads of the neck, the outer skirt terminating at a first edge opposite the top end, the inner skirt terminating at a second edge opposite the top end, the outer skirt
 - 10 having a slot therein extending inward from the edge, the slot therein being adapted to receive a portion of the lug therein when the closure is in locking position with the head.